

### **REMARKS**

Claims 1 and 3 are pending in this application. Claims 1 and 3 stand rejected.

#### **REJECTIONS UNDER 35 U.S.C. § 103:**

Reconsideration is respectfully requested of the rejections of claims 1 and 3 under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,309,978 to Donohoe et al. (“Donohoe”) in view of Aoki.

Applicants respectfully submit that neither Donohoe nor Aoki discloses or suggests a mixer outputting an unbranched mixed voltage of a main voltage, a bias voltage, and an auxiliary voltage to one of a lower electrode and an upper electrode, as essentially recited in claim 1. The bias voltage facilitates the control of heavy particles.

Applicants respectfully submit that Donohoe does not disclose or suggest a bias voltage. The Examiner states that “Donohoe et al. teach an unbranched mixed output of frequencies and power levels from three generators 31, 32, 33 (implies three voltages) used for plasma generation. ... Thus, Donohoe et al. teach ... a mixed signal of three frequencies that is used for plasma generation. Thus, Donohoe et al. teach claim limitations in this regard.” Applicants respectfully disagree. Applicants respectfully submit that none of the three generators 31, 32, 33 generates a bias voltage. Indeed, Donohoe explicitly discloses that “no independent bias source is provided in system 100”. See, column 5, lines 26-31 of Donohoe.

Moreover, it follows that because Donohoe fails to disclose a bias source, Donohoe also does not disclose a bias frequency lower than the main frequency as claimed.

Further, Applicants respectfully submit that Aoki does not cure the deficiencies in Donohoe as Aoki is silent regarding bias voltage and any relationship between bias and main frequencies.

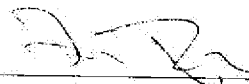
Thus, even assuming, *arguendo*, that Donohoe and Aoki were combined, the combination does not disclose or suggest a mixer outputting an unbranched mixed voltage of a main voltage, a bias voltage and an auxiliary voltage to one of a lower electrode and an upper electrode wherein the bias frequency is lower than the main frequency, as essentially recited in claim 1.

As such, Applicants respectfully submit that claim 1 is patentable over Donohoe in view of Aoki.

Further, for at least the reason that claim 3 depends from claim 1, claim 3 is also submitted to be patentably distinct over the cited references.

An early and favorable reconsideration is earnestly solicited. If the Examiner has any further questions or comments, the Examiner may telephone Applicants' Attorney to reach a prompt disposition of this application.

Respectfully submitted,



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